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SEP 10 2003

TECH CENTER



1600

## RAW SEQUENCE LISTING

DATE: 09/05/2003

PATENT APPLICATION: US/10/081,817A

TIME: 06:56:07

Input Set : A:\00530-094001.txt

Output Set: N:\CRF4\09052003\J081817A.raw

4 <110> APPLICANT: Polyak, Kornelia  
5 Porter, Dale  
6 Sgroi, Dennis  
7 Krop, Ian  
9 <120> TITLE OF INVENTION: HIN-1, A TUMOR SUPPRESSOR GENE  
11 <130> FILE REFERENCE: 00530-094001  
13 <140> CURRENT APPLICATION NUMBER: US 10/081,817A  
14 <141> CURRENT FILING DATE: 2002-02-22  
16 <150> PRIOR APPLICATION NUMBER: US 60/270,973  
17 <151> PRIOR FILING DATE: 2001-02-23  
19 <150> PRIOR APPLICATION NUMBER: US 60/351,908  
20 <151> PRIOR FILING DATE: 2002-01-25  
22 <160> NUMBER OF SEQ ID NOS: 32  
24 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
26 <210> SEQ ID NO: 1  
27 <211> LENGTH: 104  
28 <212> TYPE: PRT.  
29 <213> ORGANISM: Homo sapiens  
31 <400> SEQUENCE: 1  
32 Met Lys Leu Ala Ala Leu Leu Gly Leu Cys Val Ala Leu Ser Cys Ser  
33 1 5 10 15  
34 Ser Ala Arg Ala Phe Leu Val Gly Ser Ala Lys Pro Val Ala Gln Pro  
35 20 25 30  
36 Val Ala Ala Leu Glu Ser Ala Ala Glu Ala Gly Ala Gly Thr Leu Ala  
37 35 40 45  
38 Asn Pro Leu Gly Thr Leu Asn Pro Leu Lys Leu Leu Ser Ser Leu  
39 50 55 60  
40 Gly Ile Pro Val Asn His Leu Ile Glu Gly Ser Gln Lys Cys Val Ala  
41 65 70 75 80  
42 Glu Leu Gly Pro Gln Ala Val Gly Ala Val Lys Ala Leu Lys Ala Leu  
43 85 90 95  
44 Leu Gly Ala Leu Thr Val Phe Gly  
45 100  
47 <210> SEQ ID NO: 2  
48 <211> LENGTH: 86  
49 <212> TYPE: PRT  
50 <213> ORGANISM: Homo sapiens  
52 <400> SEQUENCE: 2  
53 Arg Ala Phe Leu Val Gly Ser Ala Lys Pro Val Ala Gln Pro Val Ala  
54 1 5 10 15  
55 Ala Leu Glu Ser Ala Ala Glu Ala Gly Ala Gly Thr Leu Ala Asn Pro  
56 20 25 30  
57 Leu Gly Thr Leu Asn Pro Leu Lys Leu Leu Ser Ser Leu Gly Ile

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```

58          35          40          45
59 Pro Val Asn His Leu Ile Glu Gly Ser Gln Lys Cys Val Ala Glu Leu
60          50          55          60
61 Gly Pro Gln Ala Val Gly Ala Val Lys Ala Leu Lys Ala Leu Leu Gly
62 65          70          75          80
63 Ala Leu Thr Val Phe Gly
64          85
66 <210> SEQ ID NO: 3
67 <211> LENGTH: 312
68 <212> TYPE: DNA
69 <213> ORGANISM: Homo sapiens
71 <400> SEQUENCE: 3
72 atgaagctcg cgcgcctcct ggggctctgc gtggccctgt cctgcagctc cgctcgtgct      60
73 ttcttagtgg gctcggccaa gcctgtggcc cagcctgtcg ctgcgctgga gtcggcgggcg      120
74 gaggccgggg ccgggaccct ggccaacccc ctgggcaccc tcaaccgct gaagctcctg      180
75 ctgagcagcc tgggcatccc cgtgaaccac ctcatagagg gctcccagaa gtgtgtggct      240
76 gagctgggtc cccaggccgt gggggccgtg aaggccctga aggccctgct gggggccctg      300
77 acagtgtttg gc                                     312
79 <210> SEQ ID NO: 4
80 <211> LENGTH: 258
81 <212> TYPE: DNA
82 <213> ORGANISM: Homo sapiens
84 <400> SEQUENCE: 4
85 cgtgctttct tagtgggctc ggccaagcct gtggcccagc ctgtcgctgc gctggagtcg      60
86 gcggcggagg ccggggccgg gaccctggcc aaccctctcg gcacctcaa cccgctgaag      120
87 ctctgtctga gcagcctggg catccccgtg aaccacctca tagagggtc ccagaagtgt      180
88 gtggctgagc tgggtcccca ggccgtgggg gccgtgaagg ccctgaaggc cctgctgggg      240
89 gccctgacag tgtttggc                                     258
91 <210> SEQ ID NO: 5
92 <211> LENGTH: 104
93 <212> TYPE: PRT
94 <213> ORGANISM: Mus musculus
96 <400> SEQUENCE: 5
97 Met Lys Leu Thr Thr Thr Phe Leu Val Leu Cys Val Ala Leu Leu Ser
98 1          5          10          15
99 Asp Ser Gly Val Ala Phe Phe Met Asp Ser Leu Ala Lys Pro Ala Val
100          20          25          30
101 Glu Pro Val Ala Ala Leu Ala Pro Ala Ala Glu Ala Val Ala Gly Ala
102          35          40          45
103 Val Pro Ser Leu Pro Leu Ser His Leu Ala Ile Leu Arg Phe Ile Leu
104          50          55          60
105 Ala Ser Met Gly Ile Pro Leu Asp Pro Leu Ile Glu Gly Ser Arg Lys
106 65          70          75          80
107 Cys Val Thr Glu Leu Gly Pro Glu Ala Val Gly Ala Val Lys Ser Leu
108          85          90          95
109 Leu Gly Val Leu Thr Met Phe Gly
110          100
112 <210> SEQ ID NO: 6
113 <211> LENGTH: 85

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114 <212> TYPE: PRT
115 <213> ORGANISM: Mus musculus
117 <400> SEQUENCE: 6
118 Val Ala Phe Phe Met Asp Ser Leu Ala Lys Pro Ala Val Glu Pro Val
119 1 5 10 15
120 Ala Ala Leu Ala Pro Ala Ala Glu Ala Val Ala Gly Ala Val Pro Ser
121 20 25 30
122 Leu Pro Leu Ser His Leu Ala Ile Leu Arg Phe Ile Leu Ala Ser Met
123 35 40 45
124 Gly Ile Pro Leu Asp Pro Leu Ile Glu Gly Ser Arg Lys Cys Val Thr
125 50 55 60
126 Glu Leu Gly Pro Glu Ala Val Gly Ala Val Lys Ser Leu Leu Gly Val
127 65 70 75 80
128 Leu Thr Met Phe Gly
129 85
131 <210> SEQ ID NO: 7
132 <211> LENGTH: 312
133 <212> TYPE: DNA
134 <213> ORGANISM: Mus musculus
136 <400> SEQUENCE: 7
137 atgaagctta ccaccacctt tctagtgtc tgtgtggctc tgctcagtga ctctggtgtt 60
138 gctttcttca tggactcatt ggccaagcct gcggtagaac ccgtggccgc ccttgcctca 120
139 gctgcagagg ctgtggcagg ggctgtgcct agcctaccat taagccactt ggcatcctg 180
140 aggttcatcc tggccagcat gggcatccca ttgatcctc tcatagaggg atccaggaag 240
141 tgtgtcaccg agctgggccc tgaggctgta ggagctgtga agtcactgct gggggtcctg 300
142 acaatgttcg gt 312
144 <210> SEQ ID NO: 8
145 <211> LENGTH: 255
146 <212> TYPE: DNA
147 <213> ORGANISM: Mus musculus
149 <400> SEQUENCE: 8
150 gttgctttct tcatggactc attggccaag cctgcggtag aaccctgggc cgcccttgct 60
151 ccagctgcag aggtgtgtgc aggggctgtg cctagcctac cattaagcca ctggccatc 120
152 ctgaggttca tcctggccag catgggcatc ccattggatc ctctcataga gggatccagg 180
153 aagtgtgtca ccgagctggg ccctgaggct gtaggagctg tgaagtcact gctgggggtc 240
154 ctgacaatgt tcggt 255
156 <210> SEQ ID NO: 9
157 <211> LENGTH: 23
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: primer
164 <400> SEQUENCE: 9
165 gagggaaagt tttttttatt tgg 23
167 <210> SEQ ID NO: 10
168 <211> LENGTH: 22
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
172 <220> FEATURE:

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## RAW SEQUENCE LISTING

DATE: 09/05/2003

PATENT APPLICATION: US/10/081,817A

TIME: 06:56:07

Input Set : A:\00530-094001.txt

Output Set: N:\CRF4\09052003\J081817A.raw

173 <223> OTHER INFORMATION: primer  
175 <400> SEQUENCE: 10  
176 caaaactaac aaaacaaaac ca 22  
178 <210> SEQ ID NO: 11  
179 <211> LENGTH: 24  
180 <212> TYPE: DNA  
181 <213> ORGANISM: Artificial Sequence  
183 <220> FEATURE:  
184 <223> OTHER INFORMATION: primer  
186 <400> SEQUENCE: 11  
187 gttaagagga agttttcgag gtgc 24  
189 <210> SEQ ID NO: 12  
190 <211> LENGTH: 24  
191 <212> TYPE: DNA  
192 <213> ORGANISM: Artificial Sequence  
194 <220> FEATURE:  
195 <223> OTHER INFORMATION: primer  
197 <400> SEQUENCE: 12  
198 ggtacgggtt ttttacgggt cgtc 24  
200 <210> SEQ ID NO: 13  
201 <211> LENGTH: 22  
202 <212> TYPE: DNA  
203 <213> ORGANISM: Artificial Sequence  
205 <220> FEATURE:  
206 <223> OTHER INFORMATION: primer  
208 <400> SEQUENCE: 13  
209 aacttcttat acccgatcct cg 22  
211 <210> SEQ ID NO: 14  
212 <211> LENGTH: 24  
213 <212> TYPE: DNA  
214 <213> ORGANISM: Artificial Sequence  
216 <220> FEATURE:  
217 <223> OTHER INFORMATION: primer  
219 <400> SEQUENCE: 14  
220 gttaagagga agtttttgag gttt 24  
222 <210> SEQ ID NO: 15  
223 <211> LENGTH: 24  
224 <212> TYPE: DNA  
225 <213> ORGANISM: Artificial Sequence  
227 <220> FEATURE:  
228 <223> OTHER INFORMATION: primer  
230 <400> SEQUENCE: 15  
231 ggtatgggtt ttttatgggt tggt 24  
233 <210> SEQ ID NO: 16  
234 <211> LENGTH: 25  
235 <212> TYPE: DNA  
236 <213> ORGANISM: Artificial Sequence  
238 <220> FEATURE:  
239 <223> OTHER INFORMATION: primer

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DATE: 09/05/2003

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TIME: 06:56:07

Input Set : A:\00530-094001.txt

Output Set: N:\CRF4\09052003\J081817A.raw

```

241 <400> SEQUENCE: 16
242 caaaacttct tatacccaat cctca 25
244 <210> SEQ ID NO: 17
245 <211> LENGTH: 21
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION: primer
252 <400> SEQUENCE: 17
253 tttccctgct tccacactag c 21
255 <210> SEQ ID NO: 18
256 <211> LENGTH: 21
257 <212> TYPE: DNA
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: primer
263 <400> SEQUENCE: 18
264 agattaagaa ggaattgacc t 21
266 <210> SEQ ID NO: 19
267 <211> LENGTH: 551
268 <212> TYPE: DNA
269 <213> ORGANISM: Homo sapiens
271 <220> FEATURE:
272 <221> NAME/KEY: misc_feature
273 <222> LOCATION: 189
274 <223> OTHER INFORMATION: n = C or G
276 <400> SEQUENCE: 19
277 cggccgggga ggccggccgg agtgaggcct gatcgctcct ggccgctcca cctccccagg 60
278 cgcagaaggc gccacgagg acccccagtg cccgacgttg ccacggctctg ggatcagagg 120
279 cagggaccag ggagccagga actgcccgc ccccgccct gccctggcgc gagggaaagct 180
W--> 280 ccctcaccng agggaaagctc ccctcaccng gccagccct gcaggggggc gcgtgggggc 240
281 agaccgcaaa gcgaaggtgc ggccgggggt gggcctcgcg gagacaaagg ccgggcctgc 300
282 ctctctcaga gggccccagc gcctgccaag aggaagtcct cgaggcccgg gcagggaagg 360
283 gggcacgggc ttcccagggc ccgccggccg cagcaggaag ttggccaggg cacggccgtg 420
284 agcggagcgg gcagggcttt ctcaggagcg cgggcgaggc cggcgctgga ggggcgagga 480
285 ccgggtataa gaagcctcgt ggccttgccc gggcagccgc aggttccccg cgcgccccga 540
286 gccccgcgc c 551
288 <210> SEQ ID NO: 20
289 <211> LENGTH: 279
290 <212> TYPE: DNA
291 <213> ORGANISM: Rattus norvegicus
293 <400> SEQUENCE: 20
294 gttctctgtt ttgtgttggt aggcgttgct ttcttggtgg attcactggc caagcctgtg 60
295 gtagaaccog tggctgccat tgctacagct gcagaggctg tggcaggggc tgtgcctagc 120
296 ctaccattaa gccacttggc catcctgagg ttcacgtga ccagcctggg catcccattg 180
297 gatcctctca tagatggttc caggaagtgc gtcaccgagc tgggccctga ggctgtagga 240
298 gctgtgaagt cactgctggg ggccctgaca acgttcggt 279
300 <210> SEQ ID NO: 21
301 <211> LENGTH: 93

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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 09/05/2003  
PATENT APPLICATION: US/10/081,817A      TIME: 06:56:08

Input Set : A:\00530-094001.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:19; N Pos. 189